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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/506,215 | 02/17/2000 | Shimada Naohiro | P/126-182 | 7056 |

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EXAMINER

PRIETO, BEATRIZ

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2142

DATE MAILED: 08/13/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/506,215

Applicant(s)

NAOHIRO, SHIMADA

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This communication is in response to amendment/request for reconsideration filed 6/13/03; claims 1-2 and 15-16 remain pending and are hereby presented for examination.
2. Acknowledgment is made of claim for foreign priority under 35 U.S.C. §119(e)-(d) or (f). All certified copies of the priority documents have been received.
3. The information disclosure statement filed 2/02/00 has been considered and initialed accordingly. An initialed copy is enclosed.

Claim Rejections - 35 USC § 103

4. Q quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.
5. Claims 1-2 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kudo U.S. Patent No. 6,256,326 in view of Ellis et. al. (Ellis) in view of 6,256,292 U.S. Patent No. 6,256,292.

Regarding claim 1, Kudo teaches claimed invention substantially as claimed, teaching a node(s) (4 and 6 of Fig. 9, col 6/lines 6-21) comprising layers (Fig. 6) including:

a first layer (layers HPT through PPI of Fig. 6), a second layer (layers MSA of Fig. 6) and a third layer (layers MSP to SPI of Figure 6);

a packet is processed ("mapped") in said first layer (Fig. 6, step b1, col 6/lines 60-col 7/line 3 and col 19/lines 42-50);

said first layer determines whether the packet is to be transmitted to another identified node via an established data link (col 6/lines 39-45, col 8/lines 17-22, transmission to the next node or adjacent node col 22/lines 17-26) and transmitting data (packet) to said third layer through said second layer when determine that the packet is to be forwarded to another node (Fig. 12, col 8/lines 4-15, 33-42);

although prior art teaches determining whether the packet is to be hopped to a next node, it does not explicitly teach, where it determines is the packet is to be dropped at said node;

Ellis teaches a system method related to transmission apparatuses and method in a communication network, wherein that line terminal equipment (LTE) (e.g. add-drop multiplexer ADM)

operate in the physical layer (first layer, path and/or line sublayer) (Fig. 1) configured with means for accessing accesses signals that need to be dropped or inserted at that site, the rest of the traffic continuing straight through (col 7/lines 39-48, Fig. 2B, element 350).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include the teaches of Ellis for judging at the first layer whether the packet is to be dropped to said node or hopped to a next node, one ordinary skilled in the art would be motivated to utilize the logical (configurable software modules) layers associated with Sonet model including transmission path, multiplex section and regeneration sections as suggest by Kudo, allowing a straight path through between two consecutive line terminal equipment and taught by Ellis.

Regarding claim 2, the first layer transmits (Kudo: Fig. 12, marked as A, col 8/lines 4-15, 33-42, Ellis: col 7/lines 21-25,64-65).

Regarding claims 15-16, these claims are the method claims associated with claims 1-2, same rationale of rejection is applicable.

Related U.S. Patents:

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; pertinence is presented in accordance with to MPEP§ 707.05. Copies of documents cited will be provided as set forth in MPEP§ 707.05(a):

U.S. Patent No. 6,169,754 (Jan. 2001);

Sugawara et. al. teaches a transmission apparatus which has a function of passing through an overhead instead of processing the overhead standardized by SDH and SONET (col 3/lines 3-6); for selectively cross-connecting a received tributary overhead and transmitting the cross-connected overhead to a far-end transmission apparatus (col 3/lines 18-21); Fig. 5, the transmission apparatus including a multiplexer comprises sets of tributary signal transmission/reception units 10, 11, a main signal switch unit 100, a overhead processing units 300, the transmission apparatus is configured for cross-connecting overheads tributary multiplexed signals and the high speed multiplexed signal and for passing the cross-connected overheads through the multiplexer itself (col 8/lines 32-51). SOH (section overhead) termination unit performing the reception of a tributary signal and the processing for a received section overhead and for extracting a portion of section overhead bytes which is passed there through and transmitted to far end multiplexer; a space switch unit 200, 210 for cross connecting collected overheads in accordance with predetermined rules in order to transmit the overheads to far-end multiplexer; and an overhead demultiplex unit 120, 140 for distributing the cross-connected overheads to the LOH insertion units or to the SOH insertion units of the respective multiplexed signal transmission/reception units. Therefore the transmission apparatus passes there through certain tributary overheads, which have been previously determined in a transmission system using the multiplexers, and processes (terminates/adds) the overheads, so as to enable desired multiplexers to use the overheads there between, at the reception layers (col 8/line 52-col 9/line 28).

U.S. Patent No. 5,805,568 (Sept. 1998):

Shinbashi teaches determining whether the packet is to be dropped at said node or passed through the next node at the reception layer, the packet is transmitted through a second layer according to said determination, wherein the electric signal produced by mapping the fixed length cell passes through the cross-connect unit, and is dropped, passes through, or is added at the tributary interface unit. To this end, the tributary interface unit owns the VC table for registering therein the virtual channel (VC) used by the low-ordered communication network in order to communicate the fixed length cell through the virtual channel. Then, the tributary interface unit drops, or passes through the fixed length cell received with reference to this VC table (col 2/lines 16-28).

7. Applicant argues prior art does not teach a first layer where a packet is mapped and a determination is made whether the packet is to be dropped at said node or to be hopped to a next node.

In response to the above-mentioned argument, it is respectfully noted that the terminal interface is configured to perform mapping functions (col 6/lines-col 7/line 3) and the optical interface is also configured to perform mapping functions (col 19/lines 42-50), logical layers on Fig. 6 illustrate that mapping and determination functions are performed at layers HPT through PPI ("first layer").

8. Applicant's argument(s) filed 6/13/03 have been fully considered but not rendered persuasive.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Prosecution of this application is closed by means of this final office action § 1.113, applicant may request continued examination of the application by filing a Request for Continued Examination of under 37 CFR § 1.114 and providing the corresponding fee set forth in § 1.17(e) for the submission of, but not limited to, new arguments, an information disclosure statement, an amendment to the written description, claims, drawings, or new evidence in support of patentability. Or applicant whose claims have been twice rejected, may appeal from the decision of the administrative patent judge to the Board of Patent Appeals and Interferences under 35 U.S.C. §134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or Faxed to:

(703) 746-7238 for TC 2100 Official After-final communications; please mark
"EXPEDITED PROCEDURE", and
(703) 746-7239 for other TC 2100 Official communications.

or:

(703) 465-7240 for Non-Official, Draft communications, status query, please
label "PROPOSED" or "DRAFT".

Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington
VA, Sixth Floor (Receptionist).



B. Prieto
TC 2100
Patent Examiner
July 12, 2003



MARK R. POWELL
SUPERVISORY PATENT EXAMINER
GROUP 2800